Project Cyberspace

Preface:

The *project cyberspace* is not listed like a normal article. It is more a philosophical view of different thoughts that are poured into a Cyberspace Software. Since the beginning of my technical career I am interested in the (from philosophy, art, culture and experimental projects) different ideas and concepts of cyberspace. Personally, I see cyberspace as a visual representation of current technical reality, with its own culture, rules and regulations and digital social development. The representation, view or general implementation of a dataspace can differ considerably from a general representation, which may be due to the fact that the concept of cyberspace (or virtual reality) is still too imprecisely defined for my scientific views.

This essay is in constant development and will take a very long time to finish, please take this into account. Thank you. In addition, individual chapters can be revised, checked for errors and updated with new data.

External influences

In the first section we will look at the influences, inspirations and other ideas that have flowed into the project. We will try to keep to a chronological order, but in some places we will have to go some side roads that end in dead ends. This should help me to understand all the points of the thought path I have taken so far. Nor will I perhaps quote well-known films, works or other sources, as they were (for me) not important enough for a body of thought. War Games is a film worth mentioning, but not in the context of virtual worlds.

Films, Series and Literature:

The first real influence or image representation of a space (within a technical system) was the film TRON from 1982, which I had only seen in 1986 and was shown again in the cinema due to a high demand. I quickly understood the very abstract concept of a user in the computer and I was fascinated by the idea. After that, The Lawnmower Man was impressed. I perceived the film more as a psycho/horror film and was fascinated by computer animation. I also asked myself how responsibility can be defined in a virtual reality, since in most cases this is linked to reality. In the last section of this paragraph, Matrix from the triology of the Wachowski sisters is mentioned here. This film has inspired me in many philosophical questions and thoughts.

From the realm of anime, the Blame! videos (Log 1-6) Works inspired. Just because the Mangaka Tsutomu NIHEI publishes very little about the interpretation of his work. Therefore, there is a very large interpretation space, so most of the images of the networksphere are partly depicted as a green meadow and a blue sky, a typical summer landscape and programs are appear as virtual existences. This shows by way of example that the concept of cyberspace and the virtual world is not subject to any design standards. We will look at this in more detail in the following paragraphs.

Cowboy Bebop. In several places the side character Edward uses an aquarium-like web. Also Serial Experiments Lain is influential for me in some places. In Lain, the virtual network is called Wired and is the sum of all technical means of communication, including cyberspace. The Wired can

connect people without a physical interface via a system and is thus a fusion of the real and virtual world.

From the general literature, William Gibson's Neuromancer Triology is worth mentioning. In this books, the term cyberspace (as a virtual internet) was not only first mentioned and coined for an entire literary genre, but also inserted into science fiction as a computer network or matrix. Many later works also refer to Gibson's technical language. Neal Stephenson< also uses this theme in his novel Snow Crash, even though he describes his virtual world as Metaverse, which is a cyberspace under a different name. As already mentioned in the introduction, there is considerable overlap.

Computer Games, Virtual Worlds and another Web Projects:

Even though I have already played some computer games (also online or via LAN), most of them were not so important to me for my cyberspace idea. For example, all ASCII-Art games have not yet been inspiring enough and also (multiplayer) games in the isometric view. Like Star Craft or Age of Empires did not yet have the potential to invite me to the right house of thought. Only the 3D technology in computer games and the genre of first-person-shooters brought me on certain ways. I had already played DOOM 1) on MS-DOS before in 1993, but that still had the appearance of fake 3D technology.

You couldn't really interact with the environment. Except for typical FPS functions (killing enemies, collecting material, opening doors) Doom was just a computer game. Even though it was possible to compete against other players in a network at Doom, I had never really noticed that. In addition, first-person shooters could only bind me for a short time, because I'm not the target group and it quickly gets boring for me. I need mental challenges and killing opponents is rather boring.

The first time that I could really interact with a room and was not only a guest without rights, I had in the computer game Half Life 1 in 1998. But what really fascinated me was a little gimmick in creating the avatar. There you could invite a spray paint image and spray it on the wall in the game. Since I was in the graffiti scene at the time as a writer, this mashup my interests. Sometime someone had found out how to invite own spray logos, because so far one had only a few example pictures of Sierra. A concept adopted in Counter Strike. In the short term we had some virtual tagging wars with other crews.

While playing I dreamed of creating my own online computer game with community functions (at that time I had no idea that I would really get an education as a software developer later on, because that was not my real life plan). A game without violence, only with the aim to paint good pictures, to meet people online or to stand up to known writers in story mode. The fact that I was only about 20 years ahead of the technology with this idea could not stop me from spinning around with this idea. I also had the thought that one could meet to chat and exchange music. what is currently heard in Paris, Tokyo, Berlin? What techniques were available in other countries when it came to cans, markers and caps. Or just to mischievously. In 2009 I switched from advertising/media design to software developing/programming.

2011 Minetest was released as Minecraft copy cat also for Linux. I had already noticed the hype about the original, but I wasn't particularly interested. Only with the open source version I had sniffed a little bit into it. I liked the concept and the stolen idea and that for a long time they had a genre in which building and not killing was defined as a game goal. Unfortunately there are not as many modifications from the fans for the copy as for the original, but this is l ess important for in-house developments. Overall, the creative mode has inspired me more for ideas.

Shadowrun has inspired me not only as literature, but also the previous computer games have contributed a small part to what I imagine in the concept of cyberspace. For example, from the 1994 game), the third person perspective and the flat data grid. Although the new releases from 2013 onwards have inspired me in some places from the shadowrun universe, the isometric perspective alone has put me off. So far there are no current cyberpunk concepts that would impress me and if there will be any cyberspace in Cyberpunk 2077 is questionable.

In 2009 I looked at Second Life for the first time (after the big hype) and somehow it wasn't mine. I really liked the concept of meeting people online in virtual worlds, but I really couldn't do anything with the implementation. The graphics were really bad (even today) and I didn't find role-plays in static scenes so tight. I attended another lecture in December, but SecondLife is not a cyberspace alternative for me. I also noticed that the concept of IP telephony/voice over IP with voice conferencing software is something I really don't want (VRChat in a nutshell) quite practical for a virtual reading)). Nevertheless, there are sufficient other reasons why SecondLife should be considered in certain cases.

3D Operating and Desktop Systems

After making my first contacts with Windows 3.1, I was a real fan of operating systems. Even though computers never played a role in our family (too expensive), I could always make contact with people who could let me work on a computer. As I described above, 3D fascinated me. Unfortunately, there were never really good projects to establish cyberspace as an operating system. There were developments like project looking glass, Compiz, Bumptop or the Sphere 3D Desktop System but none of them could establish themselves or produce successors. Perhaps this is due to the general development, because an operating system has been built up like a desk in

an office from the very beginning. There is a trash can, data is sorted into folders and the operator finds his way in these rudiments very quickly. Even if there are new developments, these are just gimmicks.

I found the first real 3D operating system for Linux and the program was called tdfsb. It had only a very simple graphic, but could convince with the technology. This made it possible to navigate within its directory structure and display files. You could look at text files, MP3s and pictures and it already had some of a retro science fiction flair. I liked the software, although the human-computer interface developed so far was not designed for this kind of technology. Controlling with the mouse and keyboard is more than exhausting and counterproductive. There was a further developed fork, which was called 3Dfsb, but it could not prevail either. Most users still seemed to be attached to the 2D desktop world, even if, as we will see later, this already seems to change.

I saw the next 3D operating system in the film Jurassic Park and thought it was a product of the film for many years. This is the fsn (file manager)) developed by Silicon Graphics. At the time of the film, there was no worldwide network (for me) to search for further information. I got my contents from a few magazines, picture libraries or from friends.

The little information I have about Tactile 3Dos (screenshot) comes from one of my own hard drives. Apparently this commercial product (if it had been free I would have downloaded and installed it) had its own website, from which I had saved quite a few screenshots. Otherwise I can't find much more about it on the internet. Unlike other products, Tactile 3Dos had already been produced very well. Unfortunately, like the other developments, it was very cumbersome to use and was very difficult for normal users with all their pipes and other 3D objects.

Since the expansion of technology for virtual applications, there seem to be some attempts to develop in the direction of a 3D operating system. One project I know and currently work on is Safespaces which is being developed by Björn Stahl. Unfortunately you can only see that 2D windows have been implemented in a virtual 3D environment, which limits the whole concept. Cyberspace would not only have to break away from the keyboard and mouse, but also redefine the file system, folder management and window. As long as people cannot free themselves from these rigid patterns of thought, all projects appear like foreign objects that cannot be integrated into the overall picture in terms of design. Before we can turn to cyberspace, we must completely rethink the idea of the user interface.

New Media Art

Some projects in the field of art have inspired me to work on my own Cyberspace. I like it when people sit down with their passion and develop ideas that are not accessible to the viewer at first glance and leave a lot of room for interpretation. Unfortunately, although the themes were considered in classical art, the full potential has not yet been fully exploited. In many works, cyberspace is usually roughly classified as virtual reality and artists are not always aware of the technology behind space. The artifacts of the city are also reflected in most exhibitions that cyberspace is an all-encompassing whole few artists can fully comprehend. Thus most ideas only scratch on the surface and symbolize the inadequacies of one's own perception. New Media Art tries to build a bridge between the two worlds.

But how to describe cyberspace? The Library of Blabber can be an experience, a computer game, art or cyberspace at the same time. With the help of virtual reality one could develop this form of space as a future home. Will such an illustrative view perhaps eventually replace the striking Wikipedia when we reach for books again instead of calling up a website? How are people included in a contemplation when almost nothing remains of space and exists as a shadow of memory. Cyberspace knows no rules of representation, it is not even subject to the laws of nature and so we have to ask ourselves whether humanity is not working unconsciously on a phylosophical parallel world. Are we trying to open up new spaces and underpin them with an artistic foundation? Is it perhaps the escape from our own reality that has become so boring to us after we have realized that technology and art can offer such a much more beautiful life?
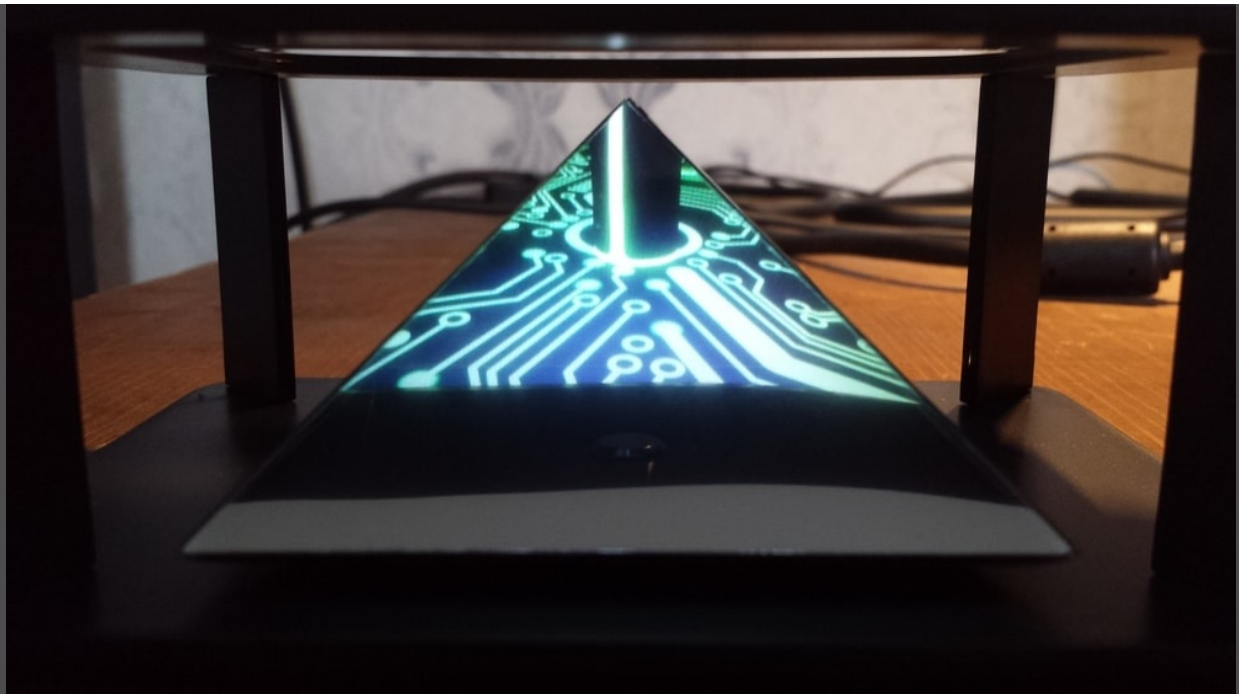
The artistic representation of a digital space can be anything. Symbolic schemas that can be seen in the mirror of reality. Shadows of the future that easily waft into our general existence and produce ideas. Mirrors can be used as projection screens in our digital spaces. Even if we do not want it we merge ever further with the technology which surrounds us in the everyday life and thereby inevitably new digital existences are born. Lain has a room. Where does she own this? On the JanusWeb. Is it a real digital existence? Not yet, but people are approaching the digital existential Lain by giving her a story, music and a planet. Through this mixing of the narrows of representation, the thoughts of concrete existence arise. Many spaces still seem playful to us, whose inventiveness is limited only by the previous technology.

Builders of all Worlds

Whenever I talk to people about cyberspaces, most of them already have a very precise idea how that looks like. Mostly in a chic retro design with blue and green neon lights. That is ok, because as we will see a cyberspace is not bound to a certain design. Many only know the picture from the 80's science fiction movies or books, just like hackers always wear a ski mask and sunglasses in the news magazines. An example shows that such an image can deceive us. Please introduce yourselves to China. Not politics, not the people, just the country. My idea of China was huge jungle with mountains and many cities on the east coast. I didn't know that the half of China is desert because I had the wrong picture in mind. Cyberspace does not necessarily have to contain cyberspace.
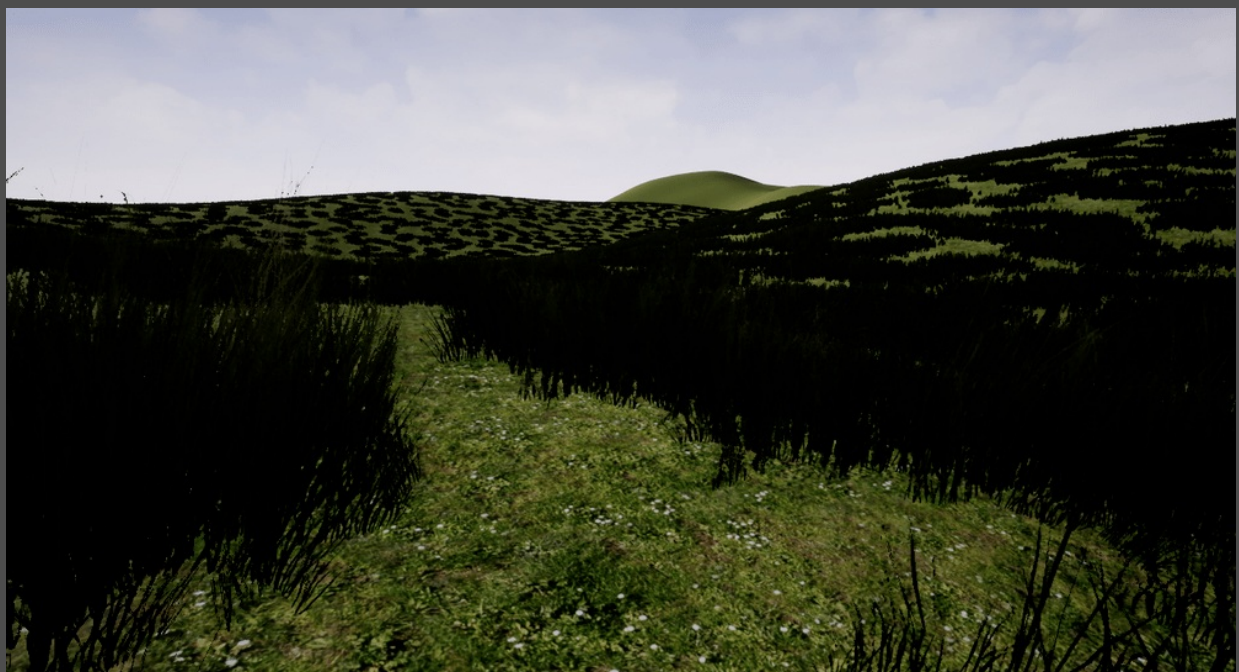
So first and foremost we should define a cyberspace as a digital space. Before I got involved in the cyberspace project, I played a little with the UE4 game engine and built a natural scene. My original idea was to create an exact representation of our reality, which differs in significant points. I later decided on the kitschy retro design because the representation of nature also consumes too

many resources for four cores.

Since I like to try alternative I bought myself garry's mod and played around with it a little. I wanted to see if I could create a mod that would implement my ideas. unfortunately, after a few days I realized that GM is really good for trash games but otherwise it is getting on in years from the graphics. I also didn't really like a texture mod I made for a little try in Minetest. To me, cyberspace is modern graphics that look retro. Just as I'd always imagined then in the past.

In the Mainframe you can easily see the design I'm aiming for. But I don't want to portray a city of the future, because I would rather have it more abstract. Still not as abstract as in the Darknet game. Not everything should consist only of geometric forms, but also who they will summarize everything in the basic structure. My cyberspace should rather invite to tinkering, programming and creative playing. Overall, there should be a basis with which users can interact. It will be possible to start your own server or create mods. It doesn't matter what this world looks like. You have to be able to interact with it reasonably.

Mirror, Mirror on the Wall...

What really inspired me to work on my own cyberspace is the idea of the avatar. An avatar allows a real person (the user) to transport himself to another role. Whether strong superhero, female tribal warrior or furry. There are no limits and you can change into anything you want. I will show some examples to give you a better picture.

In Fallout New Vegas, I'm a middle-aged man with slightly gray mottled hair. Due to an installed modification I installed my own T-shirt from the band Aegror. You could meet this avatar at any corner in reality. It's nothing special, but here it fits best into the game universe for me.

In garry's mod I had a Tron like space suit that was supposed to make my avatar look a lot like Science fiction. I didn't like all the original avatars because their military look simply didn't appeal to me in terms of taste. In order to be able to work reasonably in a neutral setting, I also wanted something (almost neutral).

In Mount & Blade: Warband - Napoleonic Wars, I usually play a woman. This is interesting from the historical point of view, because at that time women were rather less represented in acts of war. That is precisely one point I raised above. You can change anything and don't have to stick to rules. So on the multiplayer maps I can fight next to my male comrades without having to be looked at crookedly. Of course, this doesn't have to mean that these acuh are male in reality.
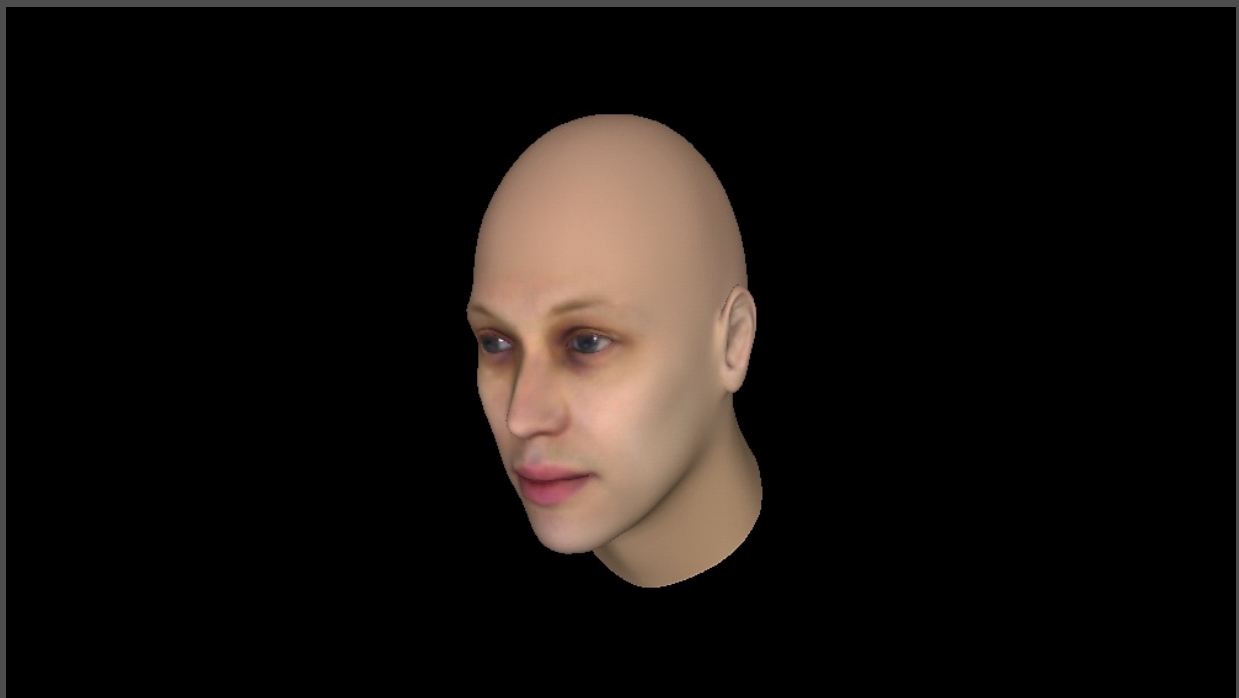
These two avatars are an image of my real existence. I created these models with old software (I really can't remember the name). Two photos are taken with a digital camera/smartphone. Once from the profile and once from the front. These were then loaded into the software. Afterwards one had to adjust the face with lines and then a very rough model of the own person was rendered from it. I had only been involved with it out of pleasure and had never seriously tried to implement a project with it. Unfortunately, the original one day went under in my countless hard drives. So you can see that you can also create yourself as an avatar. But whether people want that at all is another question.